

AMENDMENT to the CLAIMS

1. (currently amended) A computer-implemented method for converting a multilingual unidirectional domain name to a multilingual bidirectional domain name, said method comprising ~~the steps of:~~
receiving into a computer memory device a multilingual unidirectional World Wide Web address, said unidirectional World Wide Web address comprising a Uniform Resource Locator or a domain name and comprising characters from at least two character sets having at least two different display orders;
breaking by a computer establishing a plurality of labels within a said unidirectional World Wide Web address domain name into a plurality of labels delimited by by using a pre-determined full stop punctuation mark as a delimiter between said labels, said labels having an original label display order as encountered from left to right, said labels containing a plurality of characters wherein each character has a determinate display order or an indeterminate display order, said full stop punctuation mark excluding a hyphen-minus character;
within at least one of said plurality of labels ~~each said label~~, performing inferencing through resolving display directions ~~the direction~~ of indeterminate display order characters by assigning a strong direction left-to-right display order ~~left or right~~ to each indeterminate display order character; [[and]]
subsequent to said resolving, converting said multilingual unidirectional World Wide Web address to a multilingual bidirectional World Wide Web address by reordering by a computer said characters within each said label of said unidirectional domain name into a character display order using the fully resolved characters previously inferenced thereby converting said uni-directional domain name to a bidirectional domain name in which wherein said original label display order is preserved[[.]] and bidirectionality of characters within each label is produced[[.]] ; and
displaying said multilingual bidirectional World Wide Web address on a computer display.

2. (currently amended) The method as set forth in Claim 1 wherein said ~~step of~~ inferencing comprises ~~the steps of~~:

- first, assigning a right-to-left direction to Arabic and Hebrew letters;
- second, assigning a left-to-right direction to full stop characters and other alphabetic characters;
- third, resolving the directions of digits; and
- fourth, resolving the directions of hyphen-minus characters.

3. (currently amended) The method as set forth in Claim 2 wherein said ~~step of~~ resolving [[the]] directions of digits comprises ~~the steps of~~:

- assigning a right-to-left direction to [[all]] Arabic numerals; and
- assigning a left-to-right direction to [[all]] European numerals, unless a European numeral is surrounded by right-to-left characters such as Arabic or Hebrew letters, in which case ~~it is assigned~~ assigning a right-to-left direction.

4. (currently amended) The method as set forth in Claim 2 wherein said ~~step of~~ resolving [[the]] directions of hyphen-minus characters comprises:

- assigning a left-to-right direction to all hyphen-minus characters which are not surrounded by characters whose direction is right-to-left; and
- assigning a right-to-left direction to all hyphen-minus characters which are surrounded by characters whose direction is right-to-left.

5. (currently amended) A computer readable memory comprising medium encoded with computer executable software for converting a unidirectional domain name to a bidirectional domain name, said software when executed causing a computer to perform the steps of: a computer memory device suitable for encoding computer programs; and one or more computer programs encoded by said computer memory device, said computer program:

receiving into a computer memory device a multilingual unidirectional World Wide Web address, said unidirectional World Wide Web address comprising a Uniform Resource Locator or a domain name and comprising characters from at least two character sets having at least two different display orders;

breaking by a computer said unidirectional World Wide Web address into a plurality of labels delimited by pre-determined full stop punctuation mark between said labels, said labels having an original label display order as encountered from left to right, said labels containing a plurality of characters wherein each character has a determinate display order or an indeterminate display order, said full stop punctuation mark excluding a hyphen-minus character;

within at least one of said plurality of labels, performing inferencing through resolving display directions of indeterminate display order characters by assigning a strong direction left-to-right display order to each indeterminate display order character; subsequent to said resolving, converting said multilingual unidirectional World

Web address to a multilingual bidirectional World Wide Web address by reordering by a computer said characters within each said label into a display order using the fully resolved characters previously inferenced wherein said original label display order is preserved and bidirectionality of characters within each label is produced; and

displaying said multilingual bidirectional World Wide Web address on a computer display.

————— establishing a plurality of labels within a unidirectional domain name by using a
————— pre-determined full stop punctuation mark as a delimiter between said labels, said labels
————— having an original label display order as encountered from left to right;

_____ within each said label, performing inferencing through resolving the direction of
_____ indeterminate characters by assigning a strong direction left or right to each
_____ indeterminate character; and
_____ reordering said characters within each said label of said unidirectional domain-
_____ name into character display order using the fully resolved characters previously
_____ inferred, thereby converting said uni-directional domain name to a bidirectional
_____ domain name in which said original label display order is preserved, and bidirectionality
_____ of characters within each label is produced.

6. (currently amended) The computer readable ~~medium~~ memory as set forth in Claim 5 wherein said ~~software for~~ inferencing comprises ~~software for performing the steps of:~~

- first, assigning a right-to-left direction to Arabic and Hebrew letters;
- second, assigning a left-to-right direction to full stop characters and other alphabetic characters;
- third, resolving the directions of digits; and
- fourth, resolving the directions of hyphen-minus characters.

7. (currently amended) The computer readable ~~medium~~ memory as set forth in Claim 6 wherein said ~~software for~~ resolving [[the]] directions of digits comprises ~~software for performing the~~
_____ steps of:

- assigning a right-to-left direction to [[all]] Arabic numerals; and
- assigning a left-to-right direction to [[all]] European numerals, unless a European numeral is surrounded by right-to-left characters such as Arabic or Hebrew letters, in which case ~~it is assigned~~ assigning a right-to-left direction.

8. (currently amended) The computer readable ~~medium~~ memory as set forth in Claim 6 wherein said ~~software for~~ resolving [[the]] directions of hyphen-minus characters comprises ~~software for~~
 ~~performing the steps of:~~

assigning a left-to-right direction to all hyphen-minus characters which are not
surrounded by characters whose direction is right-to-left; and

assigning a right-to-left direction to all hyphen-minus characters which are surrounded by
characters whose direction is right-to-left.

9. (currently amended) A system which converts for converting a unidirectional domain name to a bidirectional domain name comprising:

- an input portion of a computing platform receiving into a computer memory device a multilingual unidirectional World Wide Web address, said unidirectional World Wide Web address comprising a Uniform Resource Locator or a domain name and comprising characters from at least two character sets having at least two different display orders;
- a label definer portion of a computer platform breaking said unidirectional World Wide Web address into a plurality of labels delimited by pre-determined full stop punctuation mark between said labels, said labels having an original label display order as encountered from left to right, said labels containing a plurality of characters wherein each character has a determinate display order or an indeterminate display order, said full stop punctuation mark excluding a hyphen-minus character adapted to establish a plurality of labels within a unidirectional domain name by using a pre-determined full stop punctuation mark as a delimiter between said labels, said labels having an original label display order as encountered from left to right;
- an inferencer portion of a computing platform performing within at least one of said plurality of labels inferencing through resolving display directions of indeterminate display order characters by assigning a strong direction left-to-right display order to each indeterminate display order character adapted to, within each said label, resolve the direction of indeterminate characters by assigning a strong direction left or right to each indeterminate character; [[and]]
- a character reorderer portion of a computing platform converting subsequent to said resolving said multilingual unidirectional World Wide Web address to a multilingual bidirectional World Wide Web address by reordering by a computer said characters within each said label into a display order using the fully resolved characters previously inferenced wherein said original label display order is preserved and bidirectionality of characters within each label is produced; and

adapted to reorder said characters within each said label of said unidirectional domain name into character display order using the fully resolved characters previously inferred, thereby converting said uni-directional domain name to a bidirectional domain name in which said original label display order is preserved, and bidirectionality of characters within each label is produced:

a user display portion of said computing platform displaying said multilingual bidirectional World Wide Web address on a computer display.

10. (currently amended) The system as set forth in Claim 9 wherein said inferencer comprises:
- a first direction assignor [[for]] assigning a right-to-left direction to Arabic and Hebrew letters;
 - a second direction assignor [[for]] assigning a left-to-right direction to full stop characters and other alphabetic characters;
 - a third direction assignor [[for]] resolving the directions of digits; and
 - a fourth direction assignor for resolving the directions of hyphen-minus characters.
11. (currently amended) The system as set forth in Claim 10 wherein said third direction assignor comprises:
- a right-to-left direction assignor [[for]] operative on [[all]] Arabic numerals, and for all European numerals which are surrounded by right-to-left characters such as Arabic and Hebrew letters; and
 - a left-to-right direction assignor [[for]] operative on [[all]] European numerals which are not surrounded by right-to-left characters such as Arabic or Hebrew letters.
12. (currently amended) The system as set forth in Claim 10 wherein said fourth direction assignor comprises:
- a left-to-right direction assignor for [[all]] hyphen-minus characters which are not surrounded by characters whose direction is right-to-left; and
 - a right-to-left direction assignor for [[all]] hyphen-minus characters which are surrounded by characters whose direction is right-to-left.

13. (previously presented) The method as set forth in Claim 1 wherein said pre-determined full stop punctuation mark used as a delimiter between said labels comprises a Latin period punctuation mark.

14. (currently amended) The computer-readable ~~medium~~ memory as set forth in Claim 5 wherein said pre-determined full stop punctuation mark used as a delimiter between said labels comprises a Latin period punctuation mark.

15. (currently amended) The system as set forth in Claim 9 wherein said pre-determined full stop punctuation mark used as a delimiter between said labels comprises a Latin period punctuation mark.